PRE-KINDERGARTEN

What to expect:

Learning is particularly important in Pre-K because at this age, children have a natural curiosity about the world around them and a willingness to learn and be taught.

Take advantage of this natural curiosity by encouraging them to make guesses, use their reasoning skills and solve problems. Pre-K-aged children are developmentally ready to learn mathematical concepts like quantity, patterns, measurement and data.

This information is a snapshot of learning in Pre-K mathematics. For a complete set of mathematics academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

By the end of the school year, your child will:

- Know number names and be able to count to 20.
- Count the number of objects in a group up to 10.
- Recognize and duplicate patterns such as red, yellow; red, yellow; red, yellow.
- Identify common shapes.
- Compare two objects.
- Describe, sort and compare real-world objects.

- Count common household objects (toys, coins, lamps, etc.).
- Create simple patterns with sounds, movements and everyday objects, such as snap, clap; snap, clap; snap, clap.
- Identify circles, squares, rectangles and triangles from everyday life.
- Identify groups of objects as same or different and as more or less.





Fostering Curiosity

Children are naturally curious and motivated to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to nurture curiosity in young children, so be sure to allow plenty of playtime. Encourage your child to ask questions, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- When you look around, do you see things that are alike or different?
- What do you see when you look outside?
- What do you like to do?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Increase vocabulary, thinking skills and curiosity by using new words and having conversations that include questions that make your child think. Communicating with others gives children a chance to see and understand that there can be more than one idea on a given subject. Accepting these different ideas helps children learn how to get along with others. This acceptance fosters positive relationships with peers and strong self-image.

Cultivate your child's communication skills with questions like these:

- What fruit would you like to eat for lunch?
- Do you think you will need a jacket today?
- What was the best part of the day and why?
- How did you help someone today?

Fostering Comprehension

It is important to give young children the opportunity to explore books. As you sit down to read together, allow your child to flip through the pages and discuss what he or she sees. Use the following questions as a guide as you talk about the books you are reading together.

BEFORE READING

- What do you see on the cover?
- What do you think the book will be about?

DURING READING

- Who is in the book?
- What has happened so far?

- Did you like reading this book? Why or why not?
- What was your favorite part of the book?

KINDERGARTEN

What to expect:

Kindergarten is when children begin to grow academically, socially and emotionally in a structured learning environment. Families play an important role in that growth as they model positive learning behaviors and become involved in school activities. Kindergartners begin to understand concepts that will become the building blocks for success in mathematics in later grades. The concepts that will form these building blocks are quantity, patterns, measurement and data. Explore these concepts through hands-on activities and by talking to children about what they notice and wonder about.

This information is a snapshot of learning in kindergarten mathematics. For a complete set of mathematics academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

By the end of the school year, your child will:

- Count numbers in order to 100 by 1's and 10's.
- Separate a small group of objects into at least two equal sets.
- Identify pennies, nickels, dimes and quarters.
- Recognize, duplicate and extend patterns.
- Arrange up to 6 objects according to lengths.
- Use smaller shapes to form a larger shape.

- Give children a group of objects and ask them to separate the objects into two equal groups.
- Say a number up to 10 and ask your child to tell you the number one more or one less than the original number.
- Collect random objects and then ask your child to sort them into groups based on color, size and shape.
- Ask your child to identify, name and describe shapes from inside your house, outside and in other familiar places.



Fostering Curiosity

Children are naturally curious and motivated to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to nurture curiosity in young children, so be sure to allow plenty of playtime. Encourage your child to ask questions, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- What do you wonder about?
- What patterns do you see when you look outside?
- What book do you want to read today?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Increase vocabulary, thinking skills and curiosity by using new words and having conversations that include questions that make your child think. Communicating with others gives children a chance to see and understand that there can be more than one idea on a given subject. Accepting these different ideas helps children learn how to get along with others. This acceptance fosters positive relationships with peers and strong self-image.

Cultivate your child's communication skills with questions like these:

- What is your favorite food and why?
- What rule have you followed today?
- What do community helpers do for people?
- How did you help someone today?

Fostering Comprehension

Kindergartners are developing beginning reading skills and an enjoyment of reading. Make time to explore books, magazines and other types of print with them and encourage conversations as you read together. Use the following questions to help your child better understand what he or she is reading.

BEFORE READING

- What do you think this book is about?
- What does this book remind you of?

DURING READING

- What do you think will happen next?
- Where and when does the story take place?

- What happened in the beginning, middle and end?
- What was your favorite part of the book and why?

FIRST GRADE

What to expect:

In first grade, children become more independent. Their counting skills will improve, and they will begin to learn addition and subtraction.

As first-graders use math tools, ask questions and develop problem-solving strategies, they gain a deeper understanding of mathematical ideas by working in a classroom group, smaller groups and independently.

This information is a snapshot of learning in first-grade mathematics. For a complete set of mathematics academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

By the end of the school year, your child will:

- Count forward from any number up to 100 by 1's, 2's, 5's and 10's.
- Solve addition and subtraction problems up to 10.
- Identify coins and their values.
- Create and complete repeating and growing patterns.
- Identify trapezoids and hexagons.
- Tell time to the hour and half-hour.

- Ask your child what time it is.
- Hand your child a few coins of the same value and ask for the combined amount.
- Create math problems together about things happening at home. For example: "We started dinner with 6 pieces of bread but have eaten 3. How many are left?"
- Identify patterns found in the real world. For example, "The clock chimes once at one o'clock and twice at two o'clock, so what will happen at three o'clock?"
- Separate objects into equal groups. For example: Cut a pizza into slices so every family member has the same number of slices.





Fostering Curiosity

Children are naturally curious and motivated to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to nurture curiosity in young children, so be sure to allow plenty of playtime. Encourage your child to ask questions, discover answers and explore his or her world.

Cultivate your child's curiosity with guiding questions like these:

- What are you interested in knowing more about?
- What else does that make you think of?
- Where do you think we can learn more about these things?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Increase vocabulary, thinking skills and curiosity by using new words and having conversations that include questions that make your child think. Communicating with others gives children a chance to see and understand that there can be more than one idea on a given subject. Accepting these different ideas helps children learn how to get along with others. This acceptance fosters positive relationships with peers and strong self-image.

Cultivate your child's communication skills with questions like these:

- Who did you play with today? What did you play?
- What was your hardest rule to follow today? Why was it hard?
- What was your favorite part of the day and why?
- Can you tell me an example of kindness you saw or showed today?

Fostering Comprehension

First-graders who are on their way to becoming independent readers need time to read alone and with others. Families should take time to talk about books, magazines and other types of print with young readers. Use the following questions to help your child better understand what he or she is reading.

BEFORE READING

- What do you think this book is about?
- What do you think will happen?
- Why did you pick this book?

DURING READING

- What has happened so far?
- What do you think will happen next?
- Where and when does the story take place?

AFTER READING

- What happened in the beginning, middle and end?
- What did you learn from the book?
- Does it remind you of any other books you have read?

Join the conversation!

SECOND GRADE

What to expect:

In second grade, children are developing their math skills by applying new knowledge to what they already know. They are learning how to make a plan for solving a problem by trying different approaches when the problem seems difficult or they do not know the solution.

At this age, children begin to understand how numbers and tools come together to create learning experiences. They can now explain how to solve a problem and why the solution works.

This information is a snapshot of learning in first-grade mathematics. For a complete set of mathematics academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

By the end of the school year, your child will:

- Read and write numbers to 1,000.
- Add and subtract one- and two-digit numbers.
- Create and describe growing and shrinking patterns of shapes and numbers.
- Read and write time on a traditional and digital clock.
- Write and illustrate fractions for halves, thirds and fourths.
- Use a ruler to measure lengths to the nearest inch and centimeter.

- Create math problems about things happening at home. For example: "We started dinner with 10 slices of pizza but have eaten 3, so how many are left?"
- Determine the value of coins up to one dollar.
- Write two different three-digit numbers on a piece of paper and ask your child which one is greater or less than.
- Ask your child to tell you what time it is.
- Practice using a ruler to measure household items.





Fostering Curiosity

Children are naturally curious and motivated to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to nurture curiosity in young children, so be sure to allow plenty of playtime. Encourage your child to ask questions, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- What do you notice or wonder about in your community?
- What new words or new things have you discovered?
- How can you solve the problems you see?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Increase vocabulary, thinking skills and curiosity by using new words and having conversations that include questions that make your child think. Communicating with others gives children a chance to see and understand that there can be more than one idea on a given subject. Accepting these different ideas helps children learn how to get along with others. This acceptance fosters positive relationships with peers and strong self-image.

Cultivate your child's communication skills with questions like these:

- If you switched places with your teacher tomorrow, what would you teach the class?
- What was the best thing that happened today? What was the worst?
- Did you learn something that challenged you today or was there something you didn't understand?

Fostering Comprehension

As second-graders continue to strengthen their reading skills, they benefit from reading independently and with adults. Exposing them to a variety of print materials such as books, magazines, etc., allows them to explore new words and ideas. Use the following questions to help your child better understand what he or she is reading.

BEFORE READING

- What do you think this book is about?
- What do you think will happen?
- What kind of book is this?

DURING READING

- What do you think will happen next?
- Where and when does the story take place?
- What do you notice about thie characters?

AFTER READING

- Why do you think the author wrote this book?
- What happened in the beginning, middle and end?
- What was your favorite part of the book?

Join the conversation!

THIRD GRADE

What to expect:

In third grade, students will build on the skills learned in first and second grade and apply their knowledge to more difficult mathematical tasks. Three of the most important third-grade math topics are multiplication, division and fractions, all of which are building blocks for many skills students will learn in later grades.

By the end of the school year, your child will:

- Read and write numbers up to 100,000.
- Know multiplication and related division facts for whole numbers up to 10, such as $3 \times 5 = 15$ and 15/3 = 5.
- Read and write fractions.
- Classify angles as acute, right, obtuse and straight.
- Find the perimeter of a shape.

- Create your own multiplication and division flashcards.
- Use the numbers on cards, dominoes and dice to practice multiplication or division with your child.
- Identify fractions around the house. For example, if a four-drawer dresser has socks in one drawer, then 1/4 of the dresser has socks in it.
- Ask your child to identify the shapes and types of angles in road signs.
- Measure the sides of four-sided objects in daily life (a table top, cell phone, etc.) and add all the sides together to find the perimeter.





Fostering Curiosity

Children are naturally curious and want to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to spark curiosity, so be sure to allow plenty of playtime. Encourage your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- What geometric shapes do you see in your neighborhood and where do you see them?
- If you had a million dollars, what would you buy first? Why?
- What patterns do you hear in your favorite song?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children's communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child's communication skills with questions like these:

- What food would be served at your favorite meal?
- How did you show kindness to someone today?
- What is your favorite outdoor activity to do with family or friends?

Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy. Use the following questions to help third-graders understand what they are reading.

BEFORE READING

- What made you pick this book?
- How is this book like another one you have read or a movie you have seen?
- What do you think the book will be about?

DURING READING

- What has happened so far in the story?
- What pictures do you see in your mind as you read?
- What words can I help you understand?

- What was the most important event in the story? Why?
- What lesson do you think the author wants the reader to learn?
 What makes you think that?
- If you could give this book a different title, what would it be? Why?

FOURTH GRADE

What to expect:

In fourth grade, math continues to build on the skills developed in third grade. One of the main areas of study in fourth grade is using arithmetic to solve problems. In this grade, students will learn more difficult multiplication and division problems and add and subtract fractions and decimals.

By the end of the school year, your child will:

- Know multiplication and related division facts for whole numbers up to 12, such as $11 \times 12 = 132$ and 132/11 = 12.
- Multiply and divide by 10, 100 and 1,000.
- Add and subtract fractions with like denominators. For example, 1/4 + 3/4 = 1.
- Read and write decimals to the hundredths place. For example, thirty-eight hundredths is the same as 0.38.
- Create patterns that grow and define the rule. The pattern 2, 10, 50, 250, for example, follows the rule of multiply by 5.
- Name, describe and classify shapes. For example, a four-sided shape with every side the same length is a square or a rhombus.

- Learn multiplication through rhythm and song.
- Ask your child to multiply a speed limit that ends in zero by 10, 100 or 1,000 when you pass the sign on a roadway.
- Design a hopscotch board labeled with fractions and decimals. Ask your child to add or subtract as they hop.
- Ask your child to identify the place value of numbers behind the decimal point. For example, in 3.2, the 2 is in the tenths place, while in 49.75, the 5 is in the hundredths place with a value of .05.
- Ask your child to keep a running record on a tablet, notepad or phone of the different shapes and angles in your neighborhood.





Fostering Curiosity

Children are naturally curious and want to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to spark curiosity, so be sure to allow plenty of playtime. Encourage your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- What is your favorite food that is cut into pieces? What is the shape of the pieces?
- In the whole world, what is the tallest animal? The shortest?
- How long do you think it takes astronauts to travel to the moon?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children's communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child's communication skills with questions like these:

- What is the most exciting adventure you could take?
- Who would you take with you on the adventure?
- What was your favorite part of the day and why?
- How did you help someone today?

Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy. Use the following questions to help fourth-graders understand what they are reading.

BEFORE READING

- Skim through the book and chapter titles. What do you think the book will be about?
- How is this book like another one you have read or a movie you have seen?
- What type of book did you choose (fiction, biography, graphic novel, etc.)? Why?

DURING READING

- What do you think will happen in the next chapter?
- Who is the main character? Who are the supporting characters?
- What words can I help you understand?

AFTER READING

- Could this story take place in today's world? Why?
- What lesson do you think the author wants the reader to learn?
 What makes you think that?
- If you were one of the characters in the book, how would you have ended the story? Why?

Join the conversation!

FIFTH GRADE

What to expect:

In fifth grade, students will practice more complex computation with fractions, decimals and larger numbers using the four basic operations: addition, subtraction, multiplication and division. Fifth-grade math also emphasizes real-world situations to help students strengthen their skills and solve problems that occur in their daily lives.

By the end of the school year, your child will:

- Divide multi-digit numbers with remainders. For example, 432 divided by 11 is 39 with a remainder of 3.
- Add and subtract decimals and fractions with like and unlike denominators. For example, 1/8 + 1/4 can be calculated as 1/8 + 2/8 = 3/8.
- Describe and find the volume of three-dimensional shapes. For example, a cube with dimensions of 4 inches wide by 3 inches deep and 4 inches tall would have a volume of 48 inches because $4 \times 3 \times 4 = 48$.
- Construct and analyze double-bar and line graphs and use ordered pairs on coordinate grids.
- Find the mean, median, mode and range from a set of numbers.

- Cook with children using recipes that include fractions.
- Determine the number of ice cubes it takes to fill a container to help your child understand the concept of volume.
- Sort objects into three to five categories and ask your child to create a graph based on the categories and explain it to you.
- Provide your child with five numbers for example, 26, 30, 32, 32, 35. Ask your child to find the *mean*, or average (31); *median*, or middle number (32); *mode*, or number that occurs the most (32); and *range*, the difference between the highest and lowest number (35 26 = 9).





Fostering Curiosity

Children are naturally curious and want to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Play is a wonderful way to spark curiosity, so be sure to allow plenty of playtime. Encourage your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- What would happen if houses were shaped like pyramids?
- Who do you think knows the largest number in the world, and how did they figure it out?
- If we didn't have coins or bills to use for money, what would we do?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children's communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child's communication skills with questions like these:

- What do you think we should have for breakfast tomorrow?
- What goals can you set to make tomorrow better than today?
- What was your favorite part of the week and why?
- How did you help someone in need today?

Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy. Use the following questions to help fifth-graders understand what they are reading.

BEFORE READING

- Is this the type of book you usually choose? Why or why not?
- By looking at the cover, what do you think the author's reason for writing the book might be?
- What do you think the book will be about?

DURING READING

- Will you read a short section to me with feeling in your voice?
- What do you do when you don't understand what you just read?
- What resources can you use to understand words you aren't familiar with?

- Give a summary of the book in 10 words.
- What problem did the main character face? What was the solution to that problem?
- What message is the author sharing with the reader? Why do you think that?

SIXTH GRADE

What to expect:

In sixth grade, the mathematical skills and understanding your child is developing will be key foundations for college and career readiness. These include working with ratios and rates and with the building blocks for algebra, variables and variable expressions.

By the end of the school year, your child will:

- Develop fluency in addition and subtraction of whole numbers and in multiplication and division of fractions, decimals and mixed numbers.
- Make connections between real-world and mathematical problems involving ratios, area and mean, and median, mode and range.
- Take real-world situations and word problems and represent them as expressions, equations and inequalities. For example, "Clara ran 10 miles, which is twice as far as Nina ran. How far did Nina run?" can be represented by 2x = 10, with x being how far Nina ran.
- Determine the likelihood or probability that events will occur. For example, if you have 12 marbles in a bag and all 12 of them are green, it is certain you will pull a green marble from the bag.

- Ask your child to look at the same item at the store in two different sizes and determine which size is the best value.
- Pick out four items for sale at a store and ask your child to calculate the mean (average) cost of the four items and how the mean changes if an item is removed.
- Show your child how fast you are driving and ask how long it will take to get home at that rate of speed if you are 20 miles away.
- Calculate how much the temperature has changed over the course of the day.
- Create story problems from real-life situations. For example, at the fair, if it costs \$5 to get in and \$1.50 per ride, how many rides can you have for \$20?





Fostering Curiosity

Children are naturally curious and want to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Provide opportunities for your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- Do you think there are fake numbers? Why or why not?
- What would happen if we didn't have the number zero?
- If you could give one gift to every child in the world, what gift would you give and why?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children's communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child's communication skills with questions like these:

- What goals can you set to help you become a better person?
- What is your favorite part of the year and why?
- How can you make a positive difference for someone today?

Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy. Use the following questions to help sixth-graders understand what they are reading.

BEFORE READING

- Are you keeping a list of books you have already read? Why would it be good to keep a list like that?
- How is this book like another book you have read or a movie you have seen?
- Why did you pick this book?

DURING READING

- As you are reading, what questions do you have for the author?
- How does this book remind you of a book you have already read or something you already know?
- What resources can you use to understand words you aren't familiar with?

- How did the setting of the story affect the characters and plot?
- What was the theme of the book? What lesson do you think the author wanted the reader to learn?
- How would you rewrite the ending of the story? Why would you change it?